UV-TPG System

**The apparatus shall be equipped with the Class1 UV Total Pressure Governor System. The UV Total Pressure Governor System (SPGS) is a J1939 CAN based pressure governing system that consists of a UV-TPG display, Twister throttle, pressure transducers and associated wiring. The UV-TPG must be capable of dual station control allowing the system to be operated from separate locations on the apparatus (dual systems do not require additional transducers).** The **UV-TPG** advanced diagnostic capability instantly notifies the operators of any out of parameter condition. It also notifies the operator of actions performed and suggests operation methods in the event of an out of parameter condition. Graphic diagnostics also provides wiring and troubleshooting information.

# **The **UV-TPG** IDisplay**

**The UV-TPG display utilizes Class1’s UltraView technology.** It is a custom tooled and programmed, 4.3 inch, full color LCD display with an (8) buttons. It shall be bonded for direct sunlight viewing. The UV-TPG is sealed to IP67 and allows for flush, pedestal or rear mounting options. The UV-TPG display can be oriented in either the portrait or landscape orientations. The UV-TPG display provides the interface to the Engine Control Module (ECM) mounted on the engine. The UV-TPG display will operate as a pressure sensing governor (PSG) utilizing the engines J1939 CAN data for optimal resolution and response. If J-1939 engine control is not supported by the engine manufacturer, then analog remote throttle control shall be provided by the UV-TPG display. The UV-TPG display utilizes control algorithms that minimize pressure spikes during low or erratic NTwater supply situations. The UV-TPG display shall be backwards compatible to any engine that supplies J1939 RPM, Temperature and Oil Pressure information providing the ability to maintain a consistent fleet fire-fighting capability and reduce operator cross training and confusion. The UV-TPG display shall have the ability to use either a 300 PSI or 600 PSI pressure transducers for discharge pressure.

The UV-TPG display is capable of storing up to 12 different languages. It shall provide the operator with the ability to adjust the display brightness for day and night mode operations. The following parameters visible at all times:

* Pump Discharge Pressure
* Engine RPM
* Engine Oil Pressure
* Engine Coolant Temperature
* Transmission Temperature
* System Voltage
* Throttle Ready Interlock Status
* Pump Engaged Interlock Status
* OKAY to Pump Interlock Status
* Operating Mode Status (RPM or Pressure)
* Target Pressure Indication (when in pressure mode)

# **Twister Throttle**

The Twister throttle is a J1939 CAN based throttle device that communicates directly with the UV-TPG display. It features a robust knob operator that can be configured to operate the engine throttle in either the clock wise or counter clockwise directions. It features a large stationary idle button in the center of the knob. It also provides the operator with “Throttle Ready” and “Throttle Active” LED indicators. The Twister throttle can be mounted away from the UV-TPG Display giving the operator hand control at waist level. This also allows the UV-TPG display to be mounted at eye level assuring that the operator has the most comfortable and ergonomic control possible.